

FDP Cost Reimbursement Research Subaward Agreement

Federal Awarding Agency: Office of Naval Research (ONR)

Pass-Through Entity (PTE):

University of Arkansas at Little Rock

Subrecipient:

Carnegie Mellon University

PTE PI: Dr. Nitin Agarwal

Sub PI: Kathleen Carley

PTE Federal Award No: N00014-17-1-2605

Subaward No: 253238-18CMU

Project Title: Developing Novel Socio-computational Methodologies to Analyze Multimedia-based Cyber Propaganda Campaigns

Subaward Period of Performance (Budget Period):

Start: 06/01/2017

End: 12/31/2018

Amount Funded This Action (USD): \$ 225,000.00

Estimated Project Period (if incrementally funded):

Start:

End:

Incrementally Estimated Total (USD): \$

Terms and Conditions

1. PTE hereby awards a cost reimbursable subaward, as described above, to Subrecipient. The Statement of Work and budget for this Subaward are as shown in Attachment 5. In its performance of Subaward work, Subrecipient shall be an independent entity and not an employee or agent of PTE.
2. Subrecipient shall submit invoices not more often than monthly and not less frequently than quarterly for allowable costs incurred. Upon the receipt of proper invoices, the PTE agrees to process payments in accordance with this Subaward and 2 CFR 200.305. All invoices shall be submitted using Subrecipient's standard invoice, but at a minimum shall include current and cumulative costs (including cost sharing), Subaward number, and certification, as required in 2 CFR 200.415 (a). Invoices that do not reference PTE Subaward number shall be returned to Subrecipient. Invoices and questions concerning invoice receipt or payments shall be directed to the party's Financial Contact, shown in Attachment 3A.
3. A final statement of cumulative costs incurred, including cost sharing, marked "FINAL" must be submitted to PTE's Financial Contact, as shown in Attachment 3A, not later than 60 days after the Project Period end date. The final statement of costs shall constitute Subrecipient's final financial report.
4. All payments shall be considered provisional and are subject to adjustment within the total estimated cost in the event such adjustment is necessary as a result of an adverse audit finding against the Subrecipient.
5. Matters concerning the technical performance of this Subaward shall be directed to the appropriate party's Principal Investigator as shown in Attachments 3A and 3B. Technical reports are required as shown in Attachment 4.
6. Matters concerning the request or negotiation of any changes in the terms, conditions, or amounts cited in this Subaward, and any changes requiring prior approval, shall be directed to each party's Authorized Official Contact, as shown in Attachments 3A and 3B. Any such change made to this Subaward requires the written approval of each party's Authorized Official, as shown in Attachments 3A and 3B.
7. The PTE may issue non-substantive changes to the Period of Performance and budget Bilaterally. Unilateral modification shall be considered valid 14 days after receipt unless otherwise indicated by Subrecipient when sent to Subrecipient's Authorized Official Contact, as shown in Attachment 3B.
8. Each party shall be responsible for its negligent acts or omissions and the negligent acts or omissions of its employees, officers, or directors, to the extent allowed by law.
9. Either party may terminate this Subaward with 30 days written notice to the appropriate party's Administrative Contact, as shown in Attachments 3A and 3B. PTE shall pay Subrecipient for termination costs as allowable under Uniform Guidance, 2 CFR 200, or 45 CFR Part 75 Appendix IX, as applicable.
10. By signing this Subaward, including the attachments hereto which are hereby incorporated by reference, Subrecipient certifies that it will perform the Statement of Work in accordance with the terms and conditions of this Subaward and the applicable terms of the Federal Award, including the appropriate Research Terms and Conditions ("RTCs") of the Federal Awarding Agency, as referenced in Attachment 2. The parties further agree that they intend this Subaward to comply with all applicable laws, regulations and requirements.

By an Authorized Official of Pass-through Entity:

(b) (6)

By an Authorized Official of Subrecipient:

Name: Steve McClellan

Date

01/23/2018

Name:

Date

Title: Vice Chancellor for Finance

Title:

AS

Attachment 1
Certifications and Assurances

Subaward Number:

253238-18CMU

Certification Regarding Lobbying (2 CFR 200.450)

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief, that no Federal appropriated funds have been paid or will be paid, by or on behalf of the Subrecipient, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement in accordance with 2 CFR 200.450.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Subrecipient shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," to the PTE.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Debarment, Suspension, and Other Responsibility Matters (2 CFR 200.213 and 2 CFR 180)

By signing this Subaward, the Subrecipient Authorized Official certifies, to the best of his/her knowledge and belief that neither the Subrecipient nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency, in accordance with 2 CFR 200.213 and 2 CFR 180.

Audit and Access to Records

Per 2 CFR 200.501- 200.521, Subrecipient certifies that it will provide notice of any adverse findings which impact this Subaward and will provide access to records as required by parts 2 CFR 200.336, 200.337, and 200.201 as applicable. If Subrecipient is not subject to the Single Audit Act, then Subrecipient will provide notice of the completion of any required audits and provide access to such audits upon request.

Program for Enhancement of Contractor Employee Protections (41 U.S.C 4712)

Subrecipient is hereby notified that they are required to: inform their employees working on any federal award that they are subject to the whistleblower rights and remedies of the pilot program; inform their employees in writing of employee whistleblower protections under 41 U.S.C §4712 in the predominant native language of the workforce; and include such requirements in any agreement made with a subcontractor or subgrantee.

The Subrecipient shall require that the language of the certifications above in this Attachment 1 be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

Use of Name

Neither party shall use the other party's name, trademarks, or other logos in any publicity, advertising, or news release without the prior written approval of an authorized representative of that party. The parties agree that each party may use factual information regarding the existence and purpose of the relationship that is the subject of this Subaward for legitimate business purposes, to satisfy any reporting and funding obligations, or as required by applicable law or regulation without written permission from the other party. In any such statement, the relationship of the parties shall be accurately and appropriately described.

Attachment 2
Federal Award Terms and Conditions

Subaward Number
253238-18CMU

Required Data Elements

The data elements required by Uniform Guidance are incorporated in the attached Federal Award.

Federal Award Issue Date	FAIN	CFDA No.
08/17/17	N00014-17-1-2605	12.300

This Subaward Is:

☒ Research & Development ☒ Subject to FFATA

CFDA Title
Basic and Applied Scientific Research
Key Personnel Per NOA

General Terms and Conditions

By signing this Subaward, Subrecipient agrees to the following:

1. To abide by the conditions on activities and restrictions on expenditure of federal funds in appropriations acts that are applicable to this Subaward to the extent those restrictions are pertinent. This includes any recent legislation noted on the Federal Awarding Agency's website:

DoD interim implementation 2 CFR 1103 (81 FR 78442), and as applicable 32 CFR Chapter I, Subchapter C, DoD Grant and Agreement Regulations, other than parts 32 and 33.
2. 2 CFR 200
3. The Federal Awarding Agency's grants policy guidance, including addenda in effect as of the beginning date of the period of performance or as amended found at:

<http://www.onr.navy.mil/contracts-grants.aspx>
4. Research Terms and Conditions, including any Federal Awarding Agency's Specific Requirements found at:

<http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/~media/Files/Contracts-Grants/docs/DoD-Research-Terms-Conditions-JUL2016.ashx>

 except for the following :
 - a. No-cost extensions require the written approval of the PTE. Any requests for a no-cost extension shall be directed to the Administrative Contact shown in Attachment 3A, not less than 30 days prior to the desired effective date of the requested change.
 - b. Any payment mechanisms and financial reporting requirements described in the applicable Federal Awarding Agency Terms and Conditions and Agency-Specific Requirements are replaced with Terms and Conditions (1) through (4) of this Subaward; and
 - c. Any prior approvals are to be sought from the PTE and not the Federal Awarding Agency.
 - d. Title to equipment as defined in 2 CFR 200.33 that is purchased or fabricated with research funds or Subrecipient cost sharing funds, as direct costs of the project or program, shall vest in the Subrecipient subject to the conditions specified in 2 CFR 200.313.
 - e. Prior approval must be sought for a change in Subrecipient PI or change in Key Personnel (defined as listed on the NOA).
5. Treatment of program income:

Additive

This section intentionally left blank

Special Terms and Conditions:

Copyrights:

Subrecipient Grants to PTE an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and perform publicly any copyrights or copyrighted material (including any computer software and its documentation and/or databases) first developed and delivered under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Subrecipient grants to PTE the right to use any written progress reports and deliverables created under this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its Federal Award.

Data Rights:

Subrecipient grants to PTE the right to use data created in the performance of this Subaward solely for the purpose of and only to the extent required to meet PTE's obligations to the Federal Government under its PTE Federal Award.

Data Sharing and Access (Check if applicable):

☐ Subrecipient agrees to comply with the Federal Awarding Agency's data sharing and access requirements as reflected in the NOA (or in the special terms below) and the Data Management/Sharing Plan submitted to the Federal Awarding Agency and attached.

Promoting Objectivity in Research (COI):

Subrecipient must designate herein which entity's Financial Conflicts of Interest policy (COI) will apply: Subrecipient

If applying its own COI policy, by execution of this Subaward, Subrecipient certifies that its policy complies with the requirements of the relevant Federal Awarding Agency as identified herein: ONR - BAA#N00014-16-R-BA01

Subrecipient shall report any financial conflict of interest to PTE's Administrative Representative or COI contact, as designated on Attachment 3A. Any financial conflicts of interest identified shall, when applicable, subsequently be reported to Federal Awarding Agency. Such report shall be made before expenditure of funds authorized in this Subaward and within 45 days of any subsequently identified COI.

Work Involving Human or Vertebrate Animals (Select Applicable Options)

☒ No Human or Vertebrate Animals

This section left intentionally blank.

Human Subjects Data (Select One) Not Applicable

This section left intentionally blank

Additional Terms

Attachment 3A
Research Subaward Agreement
Pass-Through Entity (PTE) Contacts

Subaward Number:

253238-18CMU

PTE Information

Entity Name: University of Arkansas at Little Rock

Legal Address: 2801 S. University Avenue
Little Rock, AR 72204-1000

Website: www.ualr.edu

PTE Contacts

Central Email: orsp@ualr.edu

Principal Investigator Name: Dr. Nitin Agarwal

Email: nxagarwal@ualr.edu

Telephone Number: 501-683-7155

Administrative Contact Name: Sharon Kaufman, Associate Director, ORSP

Email: sekaufman@ualr.edu

Telephone Number: 501-569-3246

COI Contact email (if different to above):

Financial Contact Name: Gayle Lenard, Associate Director, ORSP

Email: gxlenard@ualr.edu

Telephone Number: 501-569-8619

Email invoices? ☒ Yes ☐ No Invoice email (if different): gxlenard@ualr.edu

Authorized Official Name: Steve McClellan, Vice Chancellor for Finance

Email: sjmcclellan@ualr.edu

Telephone Number: 501-569-3202

PI Address:

same as above

Administrative Address:

University of Arkansas at Little Rock
Office of Research and Sponsored Programs
Ottenheimer Library Suite 512
2801 S. University Avenue
Little Rock, AR 72204-1000

Invoice Address:

University of Arkansas at Little Rock
Office of Research and Sponsored Programs
Ottenheimer Library Suite 512
2801 S. University Avenue
Little Rock, AR 72204-1000

Attachment 3B
Research Subaward Agreement
Subrecipient Contacts

Subaward Number:
253238-18CMU

Subrecipient Place of Performance

Name: **CARNEGIE MELLON UNIVERSITY**
Address: **5000 FORBES AVENUE**

City: **PITTSBURGH**

State: **PA**

EIN No.: **250969449**

Institution Type: **Private Institution of Higher Education**

Zip Code + 4: **15213-3890**
(Look up)

Is Subrecipient currently registered in SAM? ☒ Yes ☐ No

Is Subrecipient exempt from reporting compensation? ☒ Yes ☐ No

If no, please complete 3B page 2

DUNS No.:
052184116

Parent DUNS No.:

Congressional District:
PA 014

Congressional District:

Subrecipient Administrative Contact

Name: **ROBERT M. KEARNS**
Address: **5000 FORBES AVENUE**

City: **PITTSBURGH**

State: **PA**

Zip Code: **15213-3890**

Telephone: **(412) 268-8746**

Fax: **(412) 268-6279**

E-mail: **OSP@ANDREW.CMU.EDU**

Subrecipient Principal Investigator (PI)

Name: **KATHLEEN CARLEY**
Address: **5000 FORBES AVENUE**

City: **PITTSBURGH**

State: **PA**

Zip Code + 4: **15213-3890**

Telephone: **(412) 268-6016**

Fax:

E-mail: **kathleen.carley@cs.cmu.edu**

Subrecipient Financial Contact

Name: **RHONDA KLOSS**
Address: **5000 FORBES AVENUE**

City: **PITTSBURGH**

State: **PA**

Zip Code: **15213-3890**

Telephone: **(412) 268-1015**

Fax: **(412) 268-5841**

E-mail: **CMUSPA@ANDREW.CMU.EDU**

Subrecipient Authorized Official

Name: **LINDA FEUSTER DUFFY**
Address: **5000 FORBES AVENUE**

City: **PITTSBURGH**

State: **PA**

Zip Code: **15213-3890**

Telephone: **(412) 268-8746**

Fax: **(412) 268-6279**

E-mail: **OSP@ANDREW.CMU.EDU**

Attachment 3B Page 2
Research Subaward Agreement
Highest Compensated Officers

Subaward Number:

253238-18CMU

Subrecipient

Name:

CARNEGIE MELLON UNIVERSITY

PI:

KATHLEEN CARLEY

Highest Compensated Officers

The names and total compensation of the five most highly compensated officers of the entity(ies) must be listed if the entity in the preceding fiscal year received 80 percent or more of its annual gross revenues in Federal awards; and \$25,000,000 or more in annual gross revenues from Federal awards; and the public does not have access to this information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. See FFATA § 2(b)(1) Internal Revenue Code of 1986.

Officer 1 Name

Officer 1 Compensation

Officer 2 Name

Officer 2 Compensation

Officer 3 Name

Officer 3 Compensation

Officer 4 Name

Officer 4 Compensation

Officer 5 Name

Officer 5 Compensation

Attachment 4
Reporting and Prior Approval Terms

Subaward Number:

253238-18CMU

Subrecipient agrees to submit the following reports (PTE contacts are identified in Attachment 3A):

Technical Reports:

- ☒ Monthly technical/progress reports will be submitted to the PTE's Principal Investigator within 15 days of the end of the month.
- ☒ Quarterly technical/progress reports will be submitted within 30 days after the end of each project quarter to the PTE's Principal Investigator
- ☐ Annual technical / progress reports will be submitted within 60 days prior to the end of each budget period to the PTE's Administrative Contact . Such report shall also include a detailed budget for the next Budget Period, updated other support for key personnel, certification of appropriate education in the conduct of human subject research of any new key personnel, and annual IRB or IACUC approval, if applicable.
- ☒ A Final technical/progress report will be submitted to the PTE's Principal Investigator within 60 days of the end of the Project Period or after termination of this award, whichever comes first.
- ☒ Technical/progress reports on the project as may be required by PTE's Principal Investigator in order for the PTE to satisfy its reporting obligations to the Federal Awarding Agency.

Prior Approvals:

Carryover:
Carryover is automatic

Other Reports:

- ☒ In accordance with 37 CFR 401.14, Subrecipient agrees to notify PTE's Administrative Contact 60 days after Subrecipient's inventor discloses invention(s) in writing to Subrecipient's personnel responsible for patent matters. The Subrecipient will submit a final invention report using Federal Awarding Agency specific forms to the PTE's Administrative Contact within 60 days of the end of the Project Period to be included as part of the PTE's final invention report to the Federal Awarding Agency.
A negative report is required:
- ☐ Property Inventory Report (only when required by Federal Awarding Agency), specific requirements below.

Other Special Reporting Requirements:

Attachment 5
Statement of Work, Cost Sharing, Indirects & Budget

Subaward Number:

253238-18CMU

Statement of Work

☐ Below ☒ Attached, pages

If award is FFATA eligible and SOW exceeds 4000 characters, include a *Subrecipient Federal Award Project Description*

Budget Information

Indirect Information Indirect Cost Rate (IDC) Applied %

Rate Type:

Cost Sharing

If Yes, include Amount: \$

Budget Details

☐ Below ☒ Attached, pages

Budget Totals

Direct Costs \$

Indirect Costs \$

Total Costs \$

All amounts are in United States Dollars

ISR Research Proposal Budget									
Title:									
PI:		Dr. Carley							
Sponsor:		ONR							
Today's Date:		10-Apr-17							
Proposal Due Date:		10-Apr-17							
Fiscal Year		FY17							
Start Date:		10-Apr-17							
Duration (Months):		34.00							
End date:		10-Apr-17							
Proposal Assumptions - Budget Input									
Personnel By Name	# Employees	AY or CY	Input Salary	Monthly Salary	Phase 1 Months	Phase 2 Months	Phase 1	Phase 2	TOTAL
PI	100.00%	CY	(b)(4)	(b)(4)	0.0	1.5	\$0	(b)(4)	(b)(4)
Technical Professional	100.00%	CY	(b)(4)	(b)(4)	0.0	1.0	\$0	(b)(4)	(b)(4)
Technical Professional	100.00%	CY	(b)(4)	(b)(4)	0.0	0.5	\$0	(b)(4)	(b)(4)
Technical Professional	100.00%	CY	(b)(4)	(b)(4)	0.0	0.5	\$0	(b)(4)	(b)(4)
Technical Writer	100.00%	CY	(b)(4)	(b)(4)	0.0	0.0	\$0	(b)(4)	(b)(4)
Admin	100.00%	CY	(b)(4)	(b)(4)	0.0	0.0	\$0	(b)(4)	(b)(4)
TOTAL PERSONNEL							\$0	\$47,324	\$47,324
# Students (1.0 = 100% Effort)									
Grad Student PhD.	1.0	Tuition	(b)(4)	(b)(4)	9.0	9.0	\$0	(b)(4)	(b)(4)
	1.0	Stipend	(b)(4)	(b)(4)	12.0	12.0	\$0	(b)(4)	(b)(4)
TOTAL GRAD & UNDER-GRAD							\$0	\$98,668	\$98,668
Total Personnel							\$0	\$145,992	\$145,992
Fringe Benefits Rates							\$0	\$11,310	\$11,310
Fringe							\$0	\$157,302	\$157,302
TOTAL PERSONNEL & FRINGE							\$0	\$0	\$0
Travel:							\$0	\$0	\$0
Domestic - Travel							\$0	\$0	\$0
International - Travel							\$0	\$0	\$0
TOTAL TRAVEL:							\$0	\$0	\$0
Equipment							\$0	\$0	\$0
TOTAL EQUIPMENT/PARTICIPANT COSTS							\$0	\$0	\$0
Sub-total Contractual:							\$0	\$0	\$0
Other Operating							\$0	\$5,790	\$5,790
Computing							\$0	\$5,790	\$5,790
OTHER DIRECT COSTS							\$0	\$5,790	\$5,790
TOTAL DIRECT COSTS							\$0	\$163,092	\$163,092
Modified Total Direct Costs							\$0	\$105,107	\$105,107
Indirect CMU Overhead Rate:							\$0	\$61,908	\$61,908
Subcontracts F&A Base:							\$0	\$61,908	\$61,908
Total Indirect Costs							\$0	\$61,908	\$61,908
TOTAL							\$0	\$225,000	\$225,000

STATEMENT OF WORK (PROF. KATHLEEN CARLEY, CMU)

Social media is a key element in modern propaganda campaigns and information warfare. Increasingly such messages are carried in not just the text but also in the images and videos attached to the text. Further, those wishing to propagate their message have broader reach when they use multiple media in conjunction; e.g., YouTube videos that are tweeted about tend to be viewed more than those that are not. As another example, tweets containing images are more likely to go viral. It is important to note that image and video media, such as YouTube becoming the media of choice for education and entertainment. As such, YouTube is one of the fastest growing modes of behavioral steering, with various production styles catering to specific demographics (teens and youths) subjecting them to conspiracy theories, disinformation campaigns, and radicalization strategies. Increasingly, covert groups are coordinating their use of YouTube videos with Twitter, and other media to produce effective disinformation campaigns. A key element of these multi-media campaigns is that they use inconsistency in the video and text message to increase distrust, level sarcasm, and generate humor. In contrast consistency in the video and text, increases the power of both. We propose to leverage conventional social network theories, text mining, and multimedia processing concepts to identify the patterns of communication used in successful propaganda campaigns and to wage information warfare.

CMU will coordinate with ASU and UALR to conduct research on multi-media propaganda campaigns. As such CMU will develop technologies for importing data from the new ASU YouTube Tracker and VK Tracker, and the new UALR BlogTracker into the ORA tool for network analytics. This will afford the collective research team the ability to interoperate and to share data and leverage research results.

As part of the CASOS Summer Institute and the proposed winter institute, CMU will also provide training on the import of data from these tools into ORA, and on how to analyze and visualize the networks inherent in such multi-media data.

CMU will develop new algorithms, techniques, and practices for tracking covert groups and their propaganda using these multiple media. This work will build off of the current covert group detection work that uses Twitter. A key element of this work will be to develop, test, and evaluate the effectiveness of new dense group detection techniques that utilize information on both the networks of topics and actors in estimating groups and the change in groups. A key to this work will be the development of scalable network techniques for dense, weighted, and valenced networks. Current network techniques are scalable when the networks are sparse; however, our prior work has shown that propaganda activity, covert and extremist groups are linked into very dense high dimensional networks that are fluid in both membership and topics.

CMU will explore the conditions and structural properties that enable such groups to become echo chambers that support the rapid dissemination of disinformation, and reduce the likelihood that the veracity of that information becomes public knowledge. A combination of machine learning, text mining, and dynamic network techniques will be used. The focus will be on the structural properties within the group, between competing groups, and the structural properties of the key disseminating actors in a high dimensional – social, topic, and image space.

CMU will also assess the feasibility of using new image processing techniques to assess the sentiment embedded in images and to characterize the message of the image. This will then be contrasted with the sentiment in context around key concepts in the message, the dialogue of sets of messages, and the content of the message. The key here will be to develop an approach for assessing whether the message in the image/video and that in the text are similar or

different. We see this work as highly exploratory and laying the groundwork for future work in this area.

Carnegie Mellon

Institute for Software Research
School of Computer Science
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15213-3890

412.268.8383
412.268.2338 (f)

Dr. Nitin Agarwal
Professor Information Science Department
University of Arkansas at Little Rock
Email: nxagarwal@ualr.edu

Phone: (501) 683 7155

September 19, 2016

Re: Subcontract to UALR: Propaganda Dissemination and Information Warfare
Internal Spex# 170288

Dear Nitin,

This letter is to confirm our intent to participate as a subcontractor in the above-mentioned research proposal.

Enclosed is our cost projection which is necessary to solidify our subcontract agreement.

Sincerely,



Dr. Kathleen M. Carley
Carnegie Mellon University



Rob Kearns
Office of Sponsored Programs
Carnegie Mellon University

Personnel Costs

Salaries: All salaries are based on FY 2017 salaries. Faculty and staff salaries currently reflect no salary increase for FY2017 (July 1, 2016) and an anticipated 3.00% annual increase effective July 1, 2017. This incorporates merit increases as well as cost of living and market condition considerations. Graduate support is increased effective September 1. The colleges each set their graduate support rates in consultation with their faculty, department heads, deans and the Provost taking into account an evaluation of our historical market position in comparison to our peer institutions. Salaries for research faculty and staff are based on a twelve-month calendar year; salaries for teaching faculty and graduate students are based on a nine-month academic year and three summer months.

Faculty and Staff Increase Rate: FY2017 - (b) (4)
FY2018 and thereafter - (b) (4)

Average Graduate Support Increase Rate: (b) (4)

Fringe Benefits: The University's fiscal year is July 1 - June 30. Fringe benefits for faculty and staff are calculated as follows. No fringe benefits are calculated on graduate student stipends or undergraduate student wages.

	full time (b) (4)	part time ≥17.5 hrs/wk (b) (4)	part time <17.5 hrs/wk (b) (4)
FY2017	(b) (4)	(b) (4)	(b) (4)
FY2018	(b) (4)	(b) (4)	(b) (4)
thereafter	(b) (4)	(b) (4)	(b) (4)

Operating Expenses

General operating expenses are increased annually based on an estimate of inflation.

Operating Expense Increase Rate: (b) (4)

Expenditures budgeted under Operating Expenses for this proposal are costs that can be identified specifically with this particular sponsored project and are required in the direct performance of the research. Some of these expenses can be estimated with a high degree of accuracy for this project and are listed individually. Other expenses are estimated using a formula. These expenses include applicable computer supplies and software, copying, telephone and fax toll charges, postage and express mail, technical supplies and printing expenditures. These proposed expenses are based on the following percentages of research salaries and fringe benefits. The actual costs charged will be directly required for the sponsored work and can be specifically identified with a high degree of accuracy.

Computing Facilities Support (b) (4)

This percentage was derived from a comparison of Computing Facilities Support expenditures to research salaries and fringe benefits. Since we round to the nearest dollar

monthly, on a project basis, this expense may not be exactly equal to the percent times the salary dollars.

Travel

It is to attend domestic conferences required by the solicitation to disseminate the knowledge gained during the grant through papers and talks, and to help the grad students on the grant learn about current research in the area.

Overhead


Overhead on this proposal has been calculated at our current proposed or negotiated rate for all fiscal years in accordance with OMB Circular A-21, Section G.7. The modified total direct cost base (MTDC) amount used in calculating the indirect costs is the total direct costs, excluding equipment, capital expenditures, charges for tuition remission, rental costs, scholarships and fellowships, internally charged telephone, internally charged copying, and individual subcontract costs in excess of \$25,000.

Overhead Rate: (b) (4)

Attachment 6

Notice of Award (NOA) and any additional documents

- ☒ The following pages include the NOA and if applicable any additional documentation referenced throughout this Subaward.
- ☐ Not incorporating the NOA or any additional documentation to this Subaward.

		<h1 style="text-align: center;">AWARD/ MODIFICATION</h1>		3a. ISSUED BY: Office of Naval Research 875 N. Randolph Street Suite 1425 Arlington VA 22203-1995	
				3b. CFDA: 12.300	
1. INSTRUMENT TYPE: Grant Award		2. AUTHORITY: 10 USC 2358 and 31 USC 6304, as amended		3c. DUNS NUMBER: 036725083	
4. AWARD NO.: N00014-17-1-2605		5. MODIFICATION NO.: P00001		6. MODIFICATION TYPE: IF	
8. ACTIVITY/AGENCY PROPOSAL NO.: GRANT12254753		9. RECIPIENT PROPOSAL NO.: FP00009075; Liu		7. PR NO.: 4720003532	
13. ISSUED TO 13a. ADDRESS: UNIVERSITY OF ARKANSAS SYSTEM UNIVERSITY OF ARKANSAS AT LITTLE RO 2801 S UNIVERSITY AVE LITTLE ROCK AR 72204-1000 UNITED STATES OF AMERICA		13b. CAGE: 1PCW4		13c. EDI/EFT NUMBER: N/A	
13d. BUSINESS OFFICE CONTACT: Sharon Kaufman		13e. TELEPHONE NUMBER: 5015693246		13f. EMAIL ADDRESS: sekaufman@ualr.edu	
14. REMITTANCE ADDRESS (IF DIFFERENT FROM BLOCK 13): Same as Block # 13					
15. RESEARCH TITLE AND/OR DESCRIPTION OF PROJECT AND/OR PROPOSAL TITLE: Developing Novel Socio-computational Methodologies to Analyze Multimedia-based Cyber Propaganda Campaigns					
16. FUNDING PREVIOUSLY OBLIGATED: \$190,441.00 OBLIGATED BY THIS ACTION: \$1,340,337.00 TOTAL OBLIGATED ON AWARD: \$1,530,778.00 FUTURE FUNDING: \$0.00 GRANT TOTAL: \$1,530,778.00		17. CURRENT FUNDING PERIOD N/A THROUGH N/A		18. PERIOD OF PERFORMANCE 06/01/2017 THROUGH 01/31/2019	
19. ACCOUNTING AND APPROPRIATION DATA: See Attached Financial Accounting Data Sheet(s)					
20a. PRINCIPAL INVESTIGATOR/RECIPIENT TECHNICAL REPRESENTATIVE: Nitin Agarwal		21. TECHNICAL REPRESENTATIVE 21a. NAME: REBECCA GOOLSBY 21c. ADDRESS: ONR HUMAN & BIOENGINEERED SYSTEMS 875 N. Randolph Street Arlington VA 22203-1995		21b. CODE: 341	
20b. TELEPHONE NUMBER: 501-683-7155		20c. EMAIL ADDRESS: nxagarwal@ualr.edu		21d. TELEPHONE NUMBER: 7035880588	
22. AWARDING OFFICE CONTACT 22a. NAME: DIANE GALES		22b. CODE: BD255		23a. ADMINISTRATIVE OFFICE: ONR REG Office Atlanta Telephone: (404) 562-1600 100 Alabama Street, SW Suite 4R15 ATLANTA GA 30303	
22c. ADDRESS: Office of Naval Research 875 N. Randolph Street Suite 1425 Arlington VA 22203-1995		22d. TELEPHONE NUMBER: 		22e. EMAIL ADDRESS: DIANE.GALES@NAVY.MIL	
24. SUBMIT PAYMENT REQUEST TO: Same as block 23a		25a. PAYING OFFICE: DFAS-CO/WEST ENTITLEMENT OPERATIONS HQ0339 PO Box 182381 COLUMBUS OH 43218		25b. CODE: HQ0339	
26a. PATENT OFFICE: Office of Naval Research ATTN: ONR BDCC One Liberty Center 875 North Randolph Street, Suite 1425 Arlington, VA 22203-1995		26b. CODE: N00014			

AWARD NO. N00014-17-1-2605		AWARD/MODIFICATION		MODIFICATION NO. P00001	
27. SPECIAL INSTRUCTIONS: See Special Requirements on Page 5					
28. DELEGATIONS: The administration duties listed below have been delegated to the administrative office (block 23a). Upon request the awarding office contact (block 22) will make their full text available. Please direct questions to the contacts @: http://www.onr.navy.mil/Contracts-Grants/Regional-Contacts.aspx					
Full Delegation					
29. TERMS AND CONDITIONS: The following terms and conditions are incorporated herein by reference with the same force and effect as if they were given in full text. Upon request the awarding office contact named in block 22 will make their full text available, or they can be found at the specified URL.					
DOCUMENT		URL			
The following documents may be found at : http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-terms-conditions.aspx DOD RESEARCH AND DEVELOPMENT GENERAL TERMS AND CONDITIONS (JULY 2016) UAAC ACCEPTANCE C (NOV 2003) UAWA AWARD A (NOV 2003) STANDARD TERMS/CONDITIONS FOR RESEARCH GRANTS (AGENCY SPECIFIC) (FEB 2015)					
30. OPTIONS	OPTION NO.	AMOUNT		PERIOD	
(1)					
(2)					
(3)					
(4)					
31. REPORTS: The following reports must be submitted to the indicated addressees, in the indicated quantities, within 90 days following the expiration or termination of the project. Final Technical Reports must have a SF298, Report Documentation Page, accompanying them. Unless otherwise stated in the award/modification, complete Block 12a of the SF298 as follows: "Approved for Public Release; distribution is Unlimited".					
ADDRESSEE		REPORT TYPE		COPIES	
See block #21		Final Technical Report with SF298 Performance /Technical Report (As Required) with SF298		1 1	
See block #23a		Report of Inventions and Subcontracts - DD 882 Final Technical Report transmittal Letter only Performance /Technical Report (As Required) Final Federal Financial Status Report - SF425 - Including Line Item 11		1 1 1 1	
Defense Technical Information Center 8725 John J Kingman Road Ste 0944 Fort Belvoir, VA 22060-6218		Final Technical Report with SF298 Performance /Technical Report (As Required) with SF298		1 1	
See block #26a		Report of Inventions and Subcontracts - DD 882		1	
Naval Research Laboratory ATTN: CODE 5596 4555 Overlook Avenue SW Washington, DC 20375-5320		Final Technical Report Performance /Technical Report (As Required) with SF298		1 1	
32. FOR THE RECIPIENT			33. FOR THE UNITED STATES OF AMERICA		
32a. SIGNATURE OF PERSON AUTHORIZED TO SIGN			33a. SIGNATURE OF AWARDOFFICER Digitally signed by DIANE GALES 1232147012 Dated: 2017.08.17 09:20:03 EST		
32b. NAME AND TITLE OF SIGNER		32c. DATE SIGNED	33b. NAME AND TITLE OF AWARD OFFICER DIANE GALES		33c. DATE SIGNED 08/17/2017

FINANCIAL ACCOUNTING DATA SHEET- NAVY

1 CONTRACT NUMBER (CRITICAL) N00014-17-1-2605		2 SPIN (CRITICAL)		3 MOD (CRITICAL) P00001		4 PR NUMBER 4720003532										
CLINISLN	6 LINE OF ACCOUNTING													7. AMOUNT (CRITICAL)	NAVY INTERNAL USE ONLY REF DOC/ACRN	
	A ACRN (CRITICAL)	B APPROPRIATION (CRITICAL)	C SUBHEAD (CRITICAL)	D OBJ CLA	E PARM	F RFM	G SA	H AAA (CRITICAL)	I IT	J PM	K COST CODE					
											PROJ UNIT	MCC	PDU &SUF			
	AC	1771319	W2DE	410	00	014	0	050120	2D	000000	0C0023	573	869	\$1,340,337.00		
PAGE TOTAL														\$1,340,337.00		
GRAND TOTAL														\$1,340,337.00		
PREPARED/AUTHORIZED BY							COMPTROLLER APPROVAL FOR FISCAL DATA AND SIGNATURE									
DATE							BY _____								for COMPTROLLER, CNR CONTRACT REVIEWED	

FINANCIAL ACCOUNTING DATA SHEET-NON-NAVY DoD ACTIVITIES

1. CONTRACT NUMBER (CRITICAL) N00014-17-1-2605		2. SPIN (CRITICAL)		3. MOD (CRITICAL) P00001		4. PR NUMBER 4720003532			
5. CLIN/S/LIN	6. ACRN (CRITICAL)	7. ACCOUNTING CITATION				8. AMOUNT (CRITICAL)		NAVY INTERNAL USE ONLY REF DODACRN	
						PAGE TOTAL			
						GRAND TOTAL			
PREPARED/AUTHORIZED BY					COMPTROLLER APPROVAL FOR FISCAL DATA AND SIGNATURE				
DATE					BY _____ for COMPTROLLER, ONR CONTRACT REVIEWED				

AWARD NO. N00014-17-1-2605	SPECIAL REQUIREMENTS	MODIFICATION NO. P00001
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